

CORRECTED IDENTIFICATIONS AND LECTOTYPE DESIGNATION FOR *POROCHILUS ARGENTEUS* (ZIETZ) (OSTEICHTHYES: SILURIFORMES: PLOTOSIDAE)

Australian plotosid catfishes are poorly understood (Merrick & Schmida 1984; Allen 1989) and, among other problems, the taxonomy of *Porochilus argenteus* (Zietz) is confused. The present note is intended to clarify the identification of the syntypes of *P. argenteus* and to designate a lectotype. Museum abbreviations follow Leviton *et al.* (1985).

Zietz's (1896b: 410, Plate 16, Fig. 7) description of *Plotosus* (= *Porochilus*) *argenteus* was based primarily on a single, 138 mm syntype from Cooper Creek near Innamincka, South Australia. Glover (1976) incorrectly listed this specimen (SAMA F1090) as the holotype. Zietz included other specimens but scarcely mentioned them. The specimen emphasized is clearly *P. argenteus* as recognized today by Allen (1989). Upon re-examination, it fits the description well, having a concave dorsal profile between snout and dorsal fin and a smooth inner face of the pectoral spine. Dorsal-fin ray counts were difficult to obtain as the fin is in poor condition; pectoral-fin ray counts were also difficult, although an approximate value of I-6 was obtained (*cf.* I-7 in Zietz [1896b]). It is the only plotosid listed from the Horn Expedition as 'type' in the original SAMA register. A second syntype, probably SAMA F1082 (Table 1), was discussed by Zietz (1896b: 411) as follows: 'A larger specimen of about eight inches total length, from Finke River, Hermannsburg, is of darkish colour; but this is most likely caused by having been dried formerly.' Additional syntypes are not specified, but localities were listed as Barcoo River, Finke River at Idracowra, and Palm and Ilpilla creeks, all in the Northern Territory. Extant syntypes are shown in Table 1.

Several lines of evidence identify all specimens except SAMA F1090 as *Neosilurus hyrtlilii* Steindachner. Specimens of *Porochilus argenteus* are generally lighter coloured, whereas *N. hyrtlilii*

are usually dark. Zietz (1896a, b) did not record *N. hyrtlilii* in other collections of the Horn Expedition, yet they are clearly present in the Finke River (Unmack in press). Specimens examined from the Horn Expedition (BMNH, NMV, SAMA) all are *N. hyrtlilii* based on the following characters: convex or straight dorsal profile; rough inner side of pectoral spine; higher pectoral-fin ray counts. (Dorsal-fin ray and pectoral-fin ray counts could not be obtained from some specimens due to the poor condition of those fins.) (Table 1). All additional plotosid specimens examined (AMS, AMNH, BMNH, NTM, SAMA, NMV, WAM) from Finke River not associated with the Horn Expedition are *N. hyrtlilii*. Finally, all SAMA *P. argenteus* syntypes (Table 1) were not registered until 1928 and, except for F1090, had been reidentified before cataloging as *N. hyrtlilii*. Records of *P. argenteus* from the Finke River system (Zietz 1908; Glover & Sim 1978; Glover 1982; Allen 1989; Glover 1990; Larson & Martin 1990; Davis 1996; Kerle & Fleming 1996) are thus based on Zietz's record or on misidentifications of *N. hyrtlilii*. The single specimen on which Zietz's (1896b) description was largely based (SAMA F1090) is hereby designated as the lectotype since it is the only specimen in the type series identified as that species; all remaining paralectotypes are reidentified as *N. hyrtlilii*. *Porochilus argenteus* does not occur naturally in the Finke River system, where the only known plotosid is *N. hyrtlilii* (Unmack in press).

ACKNOWLEDGMENTS

Thanks to all museums and collection staff, especially T. Sim (SAMA) and to A. C. Gill for examining BMNH specimens on my behalf. Thanks to W. L. Minckley and W. N. Eschmeyer for comments on earlier drafts.

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TABLE 1. Synatypes of *Porochilus argenteus* including present identification, number of specimens, size (SL = Standard length), dorsal (D) and pectoral (P) fin counts, locality and additional relative notes.

Catalogue no.	Species	No.	Size (SL)	D	P ₁	Locality	Notes
SAMA F1082	<i>Neosilurus hyrllii</i>	1	175 mm	1-5	1-9 (at least, right was 1-10)	Finke River, Central Australia, Hermannsburg	Specimen had dried out, collected by Kempe who was a missionary there. It was most likely collected prior to the Horn Expedition since the mission had closed for two years prior to the expedition (Gillbank & Maroske 1996), hence possibly explaining its dried state as originally noted by Zietz (1896b). Originally registered as <i>Neosilurus hyrllii</i> Steindachner
SAMA F1088	<i>Neosilurus hyrllii</i>	2	168 mm			Finke River & Cooper Creek, Central Australia	Originally registered as <i>Neosilurus argenteus</i> Zietz (<i>hyrllii</i>)
SAMA F1089	<i>Neosilurus hyrllii</i>	2	101 mm			Cooper Creek near Innamincka, Central Australia	Originally registered as <i>Neosilurus argenteus</i> Zietz (<i>hyrllii</i>)
SAMA F1090	<i>Porochilus argenteus</i>	1	138 mm		1-6	Cooper Creek near Innamincka, Central Australia	Originally registered as <i>Neosilurus argenteus</i> Zietz
SAMA F1091	<i>Neosilurus hyrllii</i>	3	114 mm			Idracowra, Finke River, Central Australia	Originally registered as <i>Neosilurus hyrllii</i> Steindachner
“	“		110 mm		1-10	“	“
NMV F8632	<i>Neosilurus hyrllii</i>	1	82 mm		1-6	Finke Gorge	
BMNH 1897-1-20-46	<i>Neosilurus hyrllii</i>	1	89 mm	1-5	1-10, 1-11 (right)	Central Australia	

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